

REMARKS

Summary of the Office Action

1. Claims 17-18, 20-21, 28-29 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe, et al. (U.S. Pat. No. 5,673,322) in view of Birgersson (U.S. Pat. No. 6,138,009) in view of De Boor, et al. (U.S. Pat. 6,173,316).
2. Claims 19, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe, et al. (U.S. Pat. No. 5,673,322) in view of Birgersson (U.S. Pat. No. 6,138,009) in view of De Boor, et al. (U.S. Pat. 6,173,316) and further in view of Kikinis (U.S. Pat. No. 5,727,159).
3. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe, et al. (U.S. Pat. No. 5,673,322) in view of Birgersson (U.S. Pat. No. 6,138,009).
4. Claims 23-24, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe, et al. (U.S. Pat. No. 5,673,322) in view of Birgersson (U.S. Pat. No. 6,138,009) and further in view of De Boor, et al. (U.S. Pat. 6,173,316).
5. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe, et al. (U.S. Pat. No. 5,673,322) in view of Birgersson (U.S. Pat. No. 6,138,009) in view of De Boor, et al. (U.S. Pat. 6,173,316) and further in view of Kikinis (U.S. Pat. No. 5,727,159).

Summary of the Response

1. Claims 17, 18, 28, and 29 have been amended.
2. Claims 19-27, and 30-32 have been cancelled.
3. Claims 33-37 are new.

Rejections Under 35 U.S.C. §103

Claims 17-18, 20-21, 28-29 and 31-32 stand rejected as being obvious over Pepe, in view of Birgeson and De Boor. Applicant respectfully submits that this rejection is now moot in view of the amendments to the claims.

Claim 17 now recites features that include:

receiving a user-input through a wireless application;
in response to receiving the user-input, executing the
wireless application to generate a compressed query . . .

In the claim, the application generates the compressed query. This feature saves processing resources required to convert the query from a browser format to a protocol for transmitting the query over wireless communication channels.

Furthermore, claim 17 recites the feature of

executing the wireless application to render the data
from the Internet site using the compressed response.

Pepe does not disclose these feature. In fact, Pepe teaches away from the claimed invention.

For outgoing communications, Pepe uses a local proxy to convert input received on a browser of the device. As shown by FIG. 2, the browser signals a communication to the local proxy that is in a format other than the protocol used on the wireless channel with the remote proxy. The local proxy receives input in TCP/IP, and signals out in the wireless protocol. The TCP/IP input is from the application on the device of Pepe.

For incoming communications, Pepe teaches that the local proxy receives a response over the wireless channel in a protocol for that medium. The local proxy converts the response for the browser of the device.

For both incoming and outgoing applications, the local proxy is a required element to interface with the browser. In contrast, Claim 17 does not use a local proxy. As such, the claimed invention is more efficient and requires fewer resources.

Independent claims 28 and 29 have been amended in similar fashion to claim 17. Claims 18 depends from claim 17.

Applicant does not believe that claims 33-37 contain new matter.

For reasons stated above, a Notice of Allowance is respectfully requested.

"Version with markings to show changes made"

In the Claims:

17. (Amended) A method for accessing data over a network using a wireless device, the method comprising:

[storing a wireless application on the wireless device, including loading the wireless application to the wireless device from a network, wherein the wireless application includes software for accessing an Internet web site;

receiving user query information, wherein receiving includes processing data entered on a query form stored on the wireless device, and wherein the user query information specifies requested network data;]

receiving a user-input entered through a wireless application;

in response to the user-input, executing the wireless application to generate a compressed query;

sending [a] the compressed [transport protocol (CTP)] query to [a] an external proxy server to cause the proxy server to request data from an Internet site[, wherein the CTP compressed query is converted to a hypertext transfer protocol (HTTP) query by the proxy server];

receiving a [CTP] compressed response from the proxy server, [wherein] the [CTP] compressed response [is generated from an HTTP response by the proxy server] including data from the Internet site; and

[displaying] executing the wireless application to render the data from the Internet site using the compressed response. [requested network data on the wireless device, wherein the requested network data comprises data from the Internet web site.]

18. (Amended) The method of claim 17, **[further comprising] wherein receiving a user-input entered through a wireless application includes:**

displaying a list of wireless applications on the wireless device;

receiving a user selection of a wireless application; and

in response to the user selection, displaying a query form to allow a user to enter the user-input.

19. (Cancel) The method of claim 17, wherein displaying the requested network data comprises:

fetching compact markup language (CML) content from the proxy server; and rendering the CML content for display on the wireless device.

20. (Cancel) The method of claim 17, further comprising sending and receiving arbitrary length messages between the wireless device and the network using a reliable message protocol (RMP) that sends messages in a single packet that can be reconstructed on receipt.

21. (Cancel) The method of claim 20, wherein delivery of packets is not guaranteed, and wherein RMP includes a mechanism for retransmission of packets.

22. (Cancel) A system for wireless communication between a wireless device and a network, comprising:

at least one network computer;

at least one server coupled to the at least one network computer; and

a wireless device comprising:

a display; and

a storage device that stores a plurality of software, including,

a plurality of wireless applications, each of which is for accessing an Internet web site; and

software for converting data to a compressed transport protocol (CTP), wherein the data comprises hypertext transfer protocol (HTTP) queries sent to the server and HTTP responses received from the server.

23. (Cancel) The system of claim 22, wherein the plurality of software stored is further for:

receiving user query information, wherein receiving includes processing data entered on a query form stored on the wireless device, and wherein the user query information specifies requested network data; and

displaying requested network data on the wireless device, wherein the requested network data comprises data from the Internet web site.

24. (Cancel) The method of claim 22, wherein the plurality of software stored is further for:

displaying a list of wireless applications on the wireless device;
receiving a user selection of a wireless application; and
in response to the user selection, displaying a query form.

25. (Cancel) The method of claim 23, wherein displaying the requested network data comprises:

fetching compact markup language (CML) content from the proxy server; and
rendering the CML content for display on the wireless device.

26. (Cancel) The method of claim 22, wherein the plurality of software stored is further for sending and receiving arbitrary length messages between the wireless device and the network using a reliable message protocol (RMP) that sends messages in a single packet that can be reconstructed on receipt.

27. (Cancel) The method of claim 26, wherein delivery of packets is not guaranteed, and wherein RMP includes a mechanism for retransmission of packets.

28. (Amended) **[An electromagnetic] A computer-readable medium for wireless communications, the computer-readable medium comprising instructions which, when executed by one or more processors, cause the one or more processors to perform steps of [in a wireless device containing executable instructions which, when executed in a the wireless device cause the wireless device to]:**

[store a wireless application on the wireless device, including loading the wireless application to the wireless device from a network, wherein the wireless application includes software for accessing an Internet web site;

receive user query information, wherein receiving includes processing data entered on a query form stored on the wireless device, and wherein the user query information specifies requested network data;]

receiving a user-input entered through a wireless application;

in response to the user-input, executing the wireless application to generate a compressed query;

[send a] sending the compressed [transport protocol (CTP)] query to [a] an external proxy server to cause the proxy server to request data from an Internet site [wherein the CTP query is converted to a hypertext transfer protocol (HTTP) query by the proxy server];

[receive] receiving a [CTP] compressed response from the proxy server, [wherein] the [CTP] compressed response [is generated from an HTTP response by the proxy server] including data from the Internet site; and

[display requested network data on the wireless device, wherein the requested network data comprises data from the Internet web site] executing the wireless application to render the data from the Internet site using the compressed response.

29. (Amended) The **[method]** computer-readable medium of claim 28, **[wherein the executable instructions, when executed in a the wireless device, further cause the wireless device to]** further comprising instructions for performing steps of:

[display] displaying a list of wireless applications on the wireless device;

[receive] receiving a user selection of a wireless application; and

in response to the user selection, [display] displaying a query form to allow a user to enter the user-input.

30. (Cancel) The method of claim 28, wherein displaying the requested network data comprises:

fetching compact markup language (CML) content from the proxy server; and rendering the CML content for display on the wireless device.

31. (Cancel) The method of claim 28, wherein the executable instructions, when executed in a the wireless device, further cause the wireless device to send and receive arbitrary length messages between the wireless device and the network using a reliable message protocol (RMP) that sends messages in a single packet that can be reconstructed on receipt.

32. (Cancel) The method of claim 31, wherein delivery of packets is not guaranteed, and wherein RMP includes a mechanism for retransmission of packets.

33. (New) The method of claim 17, wherein executing the wireless application to generate a compressed query includes generating the query in compressed transport protocol (CTP).

34. (New) The method of claim 17, wherein executing the wireless application to generate a compressed query includes generating the query in compressed markup language (CML).

35. (New) The method of claim 17, wherein executing the wireless application to render the data includes executing the application to use the compressed response without converting the compressed response to another protocol.

36. (New) The computer-readable medium of claim 29, wherein instructions for executing the wireless application to generate a compressed query includes generating the query in compressed transport protocol (CTP).

37. (New) The computer-readable medium of claim 29, wherein instructions for executing the wireless application to generate a compressed query includes generating the query in compressed markup language (CML).